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## (54) DNA CONTAINING GENETIC INFORMATION OF PROTEIN HAVING CREATININE DEIMINASE ACTIVITY AND PRODUCTION OF CRETININE DEIMINASE

(57)Abstract:

PURPOSE: To provide a process for producing a large amount of creatinine deiminase in pure form at a low cast by using a genetic engineering technique.

CONSTITUTION: This invention relates to a DNA fragment having the genetic information of a creatinine deiminase which is a DNA coding the amino acid sequence described in the sequence table, a recombination vector containing the DNA fragment, a transformant transformed with the recombination vector and a process for the production of creatinine deiminase characterized by the culture of the transformant in a medium in the absence of creatinine and the separation of the produced creatinine deiminase from the cultured product.

Met Arg Ile Thr Asn Ala Ser Val Leu Asp Tyr Ala Gly Gln Val Asp  
1 6 10 12  
Leu Thr Val Glu Gly Gln Arg His Ser Thr \*\*\* Thr Phe Ser Ala Leu  
20 24 30  
Thr Thr Asn Pro Ala Ser Asn Leu Gly Leu Asp Asn Tyr Asn Leu Ala  
35 39 45  
Glu Asn Ser Thr Ala Ser Leu Val Leu Asp Glu Ser Ser Val Leu  
50 55 60  
Glu Ala Val Gln Asn Lys Ala Ser Val Asp  
65 70 75

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2.\*\*\* shows the word which can not be translated.

3.In the drawings, any words are not translated.

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CLAIMS

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[Claim(s)]

[Claim 1] The DNA fragment which has the proteinic genetic information which has creatinine deiminase activity.

[Claim 2] The DNA fragment indicated by claim 1 which carries out the code of the amino acid sequence indicated by the array number 2 of an array table.

[Claim 3] The DNA fragment indicated by claim 1 containing the base sequence indicated by the array number 1 of an array table.

[Claim 4] The recombination vector which has the DNA fragment indicated by claim 2.

[Claim 5] The transformant by which the transformation was carried out by the recombination vector indicated by claim 4.

[Claim 6] The manufacturing method of the creatinine deiminase characterized by cultivating the transformant indicated by claim 5 by the culture medium, making the creatinine deiminase generate, and extracting this creatinine deiminase.

[Claim 7] The manufacturing method of the creatinine deiminase indicated by claim 6 characterized by cultivating at the temperature near about 37 degree C.

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